

Getting the Best From Your Loudspeakers

**Phase**  
If the sound lacks definition or the bass is indistinct, the speakers could be out of phase. If this is the case please check the wiring to the loudspeakers carefully, especially if your speakers are bi-wired.

**Ancillary Equipment**  
The Atlantic SE range is compatible with the great majority of audio-visual and high fidelity equipment currently available - but a loudspeaker is only as good as the signal it gets. Your amplifier should have ample reserves of power - a low powered amplifier could run out of steam quite easily and the resulting distortion is unpleasant to listen to and could damage your speakers. A larger amplifier will usually sound better *and* enhance the reliability and performance of your loudspeakers.

**Running In**  
Loudspeakers are electro-mechanical and, like all mechanical systems, they need a 'running in' period. For the first 50 hours or so exercise care and play your system at reasonable volume levels. After running in, you will notice a significant sonic improvement.

**Connecting Wires**  
Avoid trailing cables across open floor spaces where they can be a source of danger. Route cables safely under carpets or along room boundaries.

When mounting a loudspeaker on a wall the connecting cables may be unacceptably obvious. Whilst cables can be routed from the loudspeaker to the floor, it may be less obtrusive to route cables from the loudspeaker to the ceiling and then within the ceiling (or possibly coving) or immediately underneath the ceiling (or coving). The cable may then return to floor level at a convenient room corner.

**Care and Maintenance**  
Little maintenance is required. The cabinets can be occasionally wiped with a damp (not wet) cloth. Spray polish, if used, should be applied sparingly and the polish sprayed onto a cloth and then applied to the speaker. NEVER spray the grille cloth or the speaker drive units. To clean the grilles, remove them first before gently brushing with a soft brush. Never use solvent cleaners, minor stains are best removed with soap and lukewarm water. Avoid touching the drive units as they can easily be damaged.

Troubleshooting Guide

If your sound system appears not to be working as well as you expect, the following notes may be of some help.

Before investigating the cause of a problem, always switch off the system at the mains.

If you are using Atlantic SE loudspeakers in a Home Theatre system remember that such systems can be quite complex and there is often a variety of factors involved.

Please read this manual together with all the manuals concerning the rest of your system.

If, having attempted to resolve the problem, the trouble still persists, consult your dealer for assistance.

Do NOT try to remove any covers on the products or attempt to dismantle them in anyway. There are no user serviceable parts inside and you will invalidate any warranty.

Symptom	Possible Cause
No Sound	System not switched on Speaker cables shorting terminals out Wrong source selected
Sound lacks bass content Bass reproduction muddy or indistinct	Subwoofer not switched on (if powered subwoofer is used) Loudspeakers wired incorrectly
Excessive bass distortion at low volume levels	Subwoofer level set too high (where AV Processor is used) LFE level set too high (where AV Processor is used)
Excessive or distorted bass at high volume levels	System level set too high Bass control set too high Loudspeakers too close to room corners
Distorted or rattling sounds at high volume levels	System level set too high Objects placed on loudspeakers Objects too close to loudspeakers
Popping sounds or thumps from the Front Channels (or subwoofer where used)	System level set too high Subwoofer level set too high (where AV Processor is used) LFE level set too high (where AV Processor is used)
Indistinct sound, poor localisation of effects	One or more loudspeakers is out of phase (See the relevant pages of this manual for the correct connection procedure)
Television picture is distorted or there is colour distortion	Loudspeakers are too close to the TV. (Switch off the system and TV. Move loudspeakers away. Leave 20 mins. Switch on again)

A wide range of AV and audio topics can be found at the Wharfedale web site. [www.wharfedale.co.uk](http://www.wharfedale.co.uk)

Specifications

	AT100SE	AT200SE	AT300SE	AT350SE	AT400SE	AT500SE	AT-CENTRE SE
Nominal Impedance	6 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms
Recommended Amplifier Power	15-150 Watts	15-150 Watts	15-170 Watts	15-170 Watts	20-200 Watts	20-250 Watts	15-150 Watts
Sensitivity (1W@1M)	87dB	88dB	88dB	88dB	90dB	92dB	88dB
Freq. Response (-6dB)	55Hz - 24kHz	45Hz - 24kHz	40Hz - 24kHz	35Hz - 24kHz	30Hz - 24kHz	28Hz - 24kHz	70Hz - 24kHz
Drive Units Bass Midrange Tweeter	170mm Bass/Mid 25mm Textile Dome	170mm Bass/Mid 25mm Textile Dome	200mm Bass/Mid 25mm Textile Dome	200mm Bass/Mid 25mm Textile Dome	200mmx2 Bass/Mid 25mm Textile Dome	200mmx3 Bass/Mid 25mm Textile Dome	100mmx2 Bass/Mid 25mm Textile Dome
Dimensions Overall H x W x D mm H x W x D inches	380x210x170 15x8.3x6.7	380x210x245 15x8.3x9.65	625x250x269 24.6x9.8x10.6	805x250x269 31.7x9.8x10.6	805x250x269 31.7x9.8x10.6	1080x250x269 42.5x9.8x10.6	150x396x228 5.9x15.6x9.0

Wharfedale Atlantic SE loudspeakers are compatible with 4 and 8 Ohm amplifiers

Service & Information

Product service enquiries should, in the first instance, be referred to the supplying dealer. In cases of difficulty or for other product enquiries please contact the appointed Wharfedale distributor for the country.

UK

**Wharfedale International Ltd.**  
IAG House, Sovereign Court,  
Ermine Business Park, Huntingdon,  
Cambs PE29 6XU, England.  
Tel: +44 (0)1480 447700  
Fax: +44 (0)1480 431767  
[www.wharfedale.co.uk](http://www.wharfedale.co.uk)

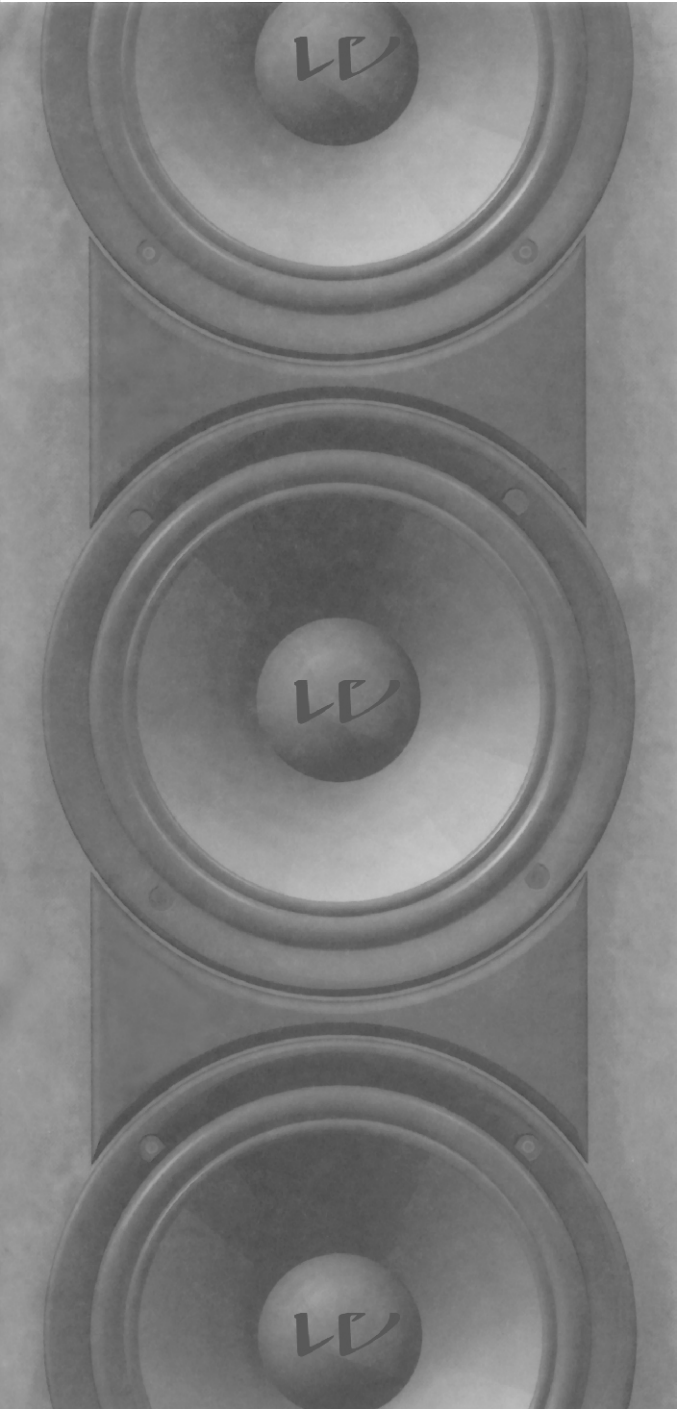
USA

**IAG America, Inc.**  
15 Walpole park South  
Walpole MA 02081  
Tel: +1 508 850 3950

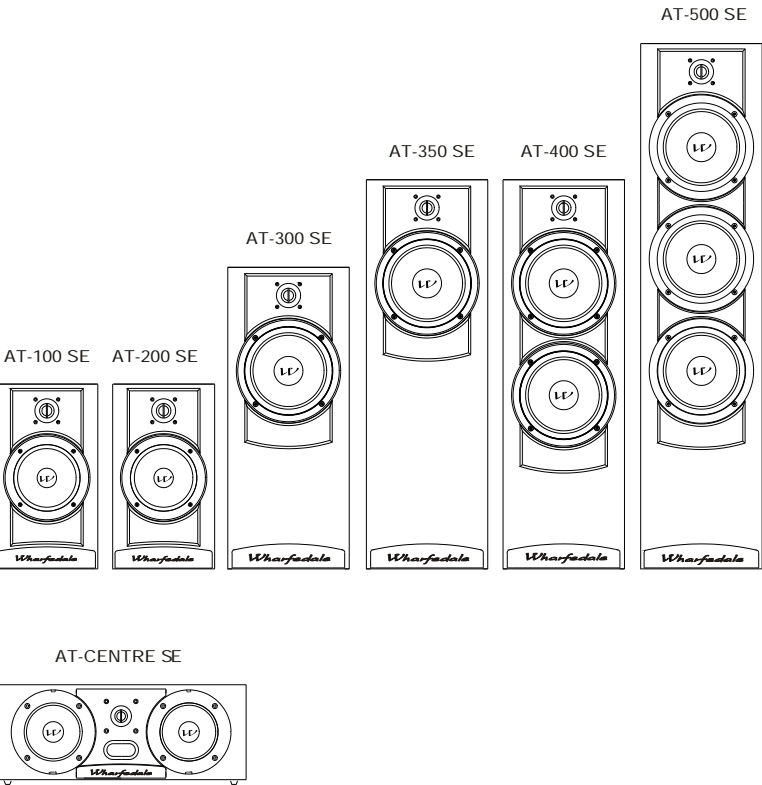
CANADA

**Korbon Trading Ltd**  
6800 Kilimat Road Units 19-20  
Mississauga Ontario  
Tel: +1 905 567 1920

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Atlantic SE Series Instruction Manual



**Wharfedale**  
BRITAIN'S MOST FAMOUS LOUDSPEAKERS



# Wharfedale Atlantic SE Installation and User Guide

## Introduction

The Wharfedale ATLANTIC SE Series is a range of versatile loudspeakers using advanced materials and the latest precision manufacturing techniques. The range features bookshelf and floor-standing models and a centre channel unit for Home Theatre applications. Thank you for your confidence in purchasing Wharfedale. We hope that your loudspeakers will give you a rewarding listening experience for many years.

**Please read these instructions carefully before installing your Wharfedale loudspeakers.**

Before making connections to any part of your sound system make sure the amplifier and all connected sources are switched off.

When you switch on your system or change sources, set the volume control to minimum and turn up the level gradually.

DO NOT use your amplifier at full volume. The position of the Volume Control is NOT a reliable guide as to the maximum volume level or capabilities of your sound system. Playing the system with extreme high settings of volume and tone controls will result in distorted sound and may damage the amplifier and loudspeakers.

DO NOT connect loudspeaker terminals to the mains supply.

Ensure that all loudspeakers in the system are correctly wired and are in phase.

## Preliminaries

### Unpacking the Speakers

Carefully remove each loudspeaker from its packing carton. Be especially careful when removing the polythene bag. DO NOT attempt to lift the loudspeaker by the polythene bag.

Retain the packing for future use. If you decide to dispose of the packing, please do so safely.

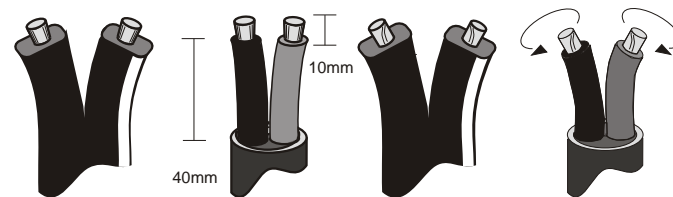
## Connections and Terminals

### Choosing and Preparing Cables

Specialist audio cable will usually offer better performance than general purpose 'bell' or 'zip' wire.

Choose a cable of suitable diameter - cable that is too thin will limit the dynamics of the sound and may impair the bass response. Audio cable is polarised, with two cores of different colours, or often a coloured tracer in the case of twin cable.

Split the twin cores to a depth of about 40mm. Carefully strip the insulation from each end, leaving about 10mm of bare wire. If the cable is stranded, lightly twist to gather any loose strands.



DO NOT subject your loudspeakers to excessive cold, heat, humidity or sunlight.

**WARNING:** To reduce the risk of fire or electrical shock do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources - such as candles - must be placed on the product.

DO NOT place heavy objects on top of loudspeaker cabinets.

NEVER let anyone, especially children push anything into holes, slots or any other opening in the case.

If you wish to play your loudspeakers with their grilles removed be careful to protect the drive units from children and pets.

DO NOT use makeshift stands. Always fit a manufacturer's approved stand according to the instructions and using the fixings provided. Your dealer will advise you.

DO NOT attempt to dismantle the loudspeaker. There are no user serviceable parts inside and you will invalidate the warranty.

Site regular loudspeakers at least 0.5m away from TV sets and magnetic storage media. The drive units of the AT-Centre SE loudspeaker are screened and may be safely used close to a TV set.

### Atlantic- Centre Channel loudspeaker

A set of self adhesive pads is provided. Peel off the backing material and fix a pad at each corner of the bottom surface of the loudspeaker.

### Crossover Networks

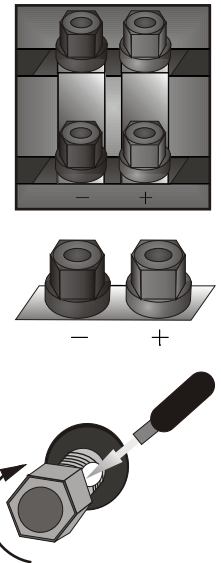
Standard Atlantic SE loudspeakers use a crossover panel with four terminal binding posts. As supplied, the upper pair is connected to the lower pair via removable metal straps. These should be left in place for standard installations.

### Atlantic-Centre SE

The Atlantic-Centre SE loudspeaker uses a crossover panel with twin binding posts.

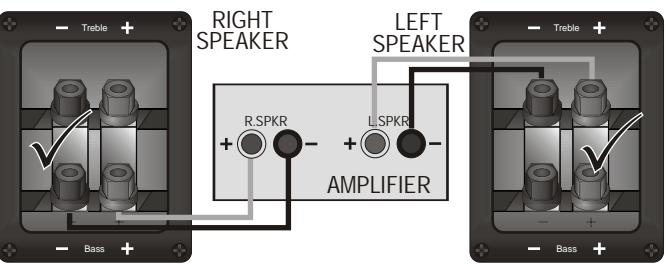
### Connecting Speaker Terminals

Unscrew the terminal. Thread the bared end of each cable through the hole in the bottom of the terminal post. Ensure that there are no loose strands which may touch adjacent terminals. Retighten the terminal securely



## Connecting Your Loudspeakers

### Standard Connections

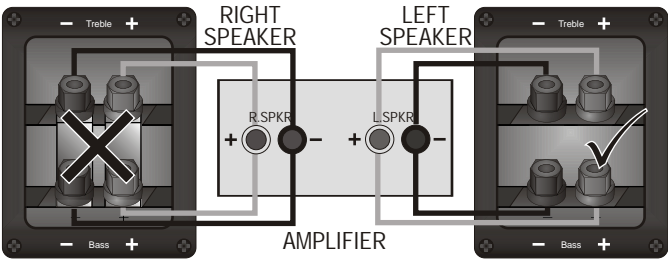


Choose a suitable length of twin core speaker cable for each channel, and prepare the ends as described above.

Connect the red, positive (+) terminal of the Left loudspeaker to the corresponding red, positive (+) amplifier terminal. Connect the black, negative (-) terminals similarly. Repeat this procedure for the Right Channel.

You may connect the loudspeakers using either the upper or the lower pair of terminals as in the illustration.

### Bi-Wiring Connections



Using separate cables for treble and bass units reduces intermodulation effects and improves headroom and clarity. This technique is known as Bi-Wiring. To bi-wire, you will need to install two lengths of twin core cable between the amplifier and each loudspeaker.

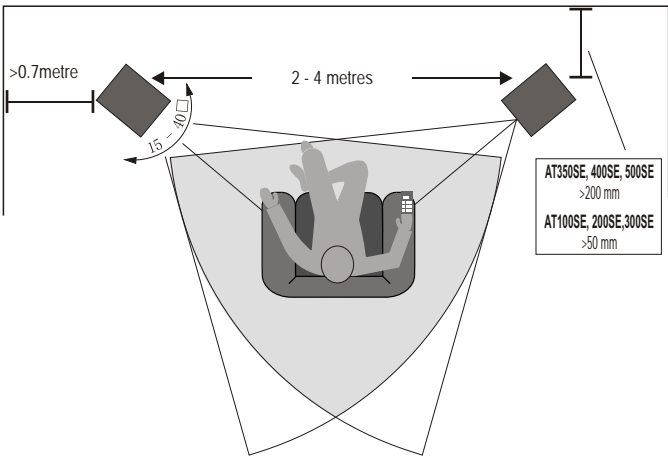
Unscrew each terminal a few turns and remove the metal straps. The upper pair of terminals on the crossover panel feeds the treble units and the lower terminals feed the bass unit. Connect the cables

## Positioning Your Loudspeakers

### Conventional Loudspeakers

Models AT350SE, AT400SE & AT500SE are designed to be floor standing. We suggest that they are positioned at least 200 mm from the rear walls and 700 mm from the side walls, facing slightly inwards.

Models AT100SE, AT200SE & AT300SE should ideally be stand or wall mounted though they may be placed on a rigid shelf. The bass



extension will improve if these speakers are operated closer to the rear walls.

between the amplifier and the loudspeakers as indicated below and re-tighten all the terminals securely.

**Note:** Atlantic 100SE is supplied with 2 port bungs to be inserted when the speaker is used flush mounted on a wall as a surround speaker

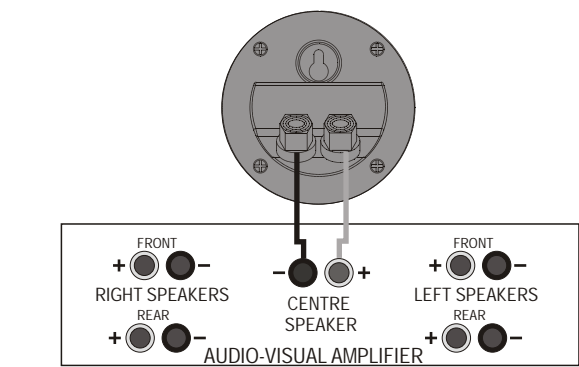
**Note:** Some amplifiers have two pairs of output terminals to facilitate bi-wiring but this is not essential. The advantages of bi-wiring are still fully retained if your amplifier has only one pair of output terminals per channel (as in the illustration above).

### Bi-Amplifying (Bi-Amping)

By connecting each loudspeaker drive unit to its own dedicated amplifier the advantages of Bi-Wiring can be extended. If you own two identical stereo power amplifiers, the Atlantic SE series may be Bi-Amped. For further details please consult your dealer.

### Centre Channel Loudspeaker Connections

The Atlantic-Centre Channel loudspeaker is intended for use specifically with Audio Visual units having a dedicated Centre Channel loudspeaker output. Connect the loudspeaker to your A/V unit as shown, again observing polarity.



**Note:** Be especially careful to observe polarity. This is especially important if you are bi-wiring or using loudspeakers in a multi-speaker (Home Theatre) system.

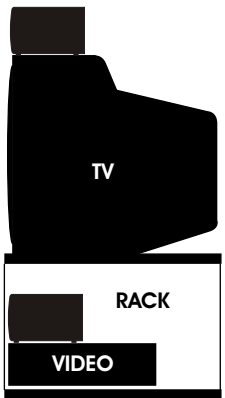
If the loudspeakers are placed too close to the walls the bass will increase but may be boomy and indistinct. If the loudspeakers are placed further away from the walls, the inward angle may be increased by up to 40%, although this may restrict the width of the optimum listening position. (Refer to the diagram above.)

The above are our general recommendations. Personal taste plays a large role so experiment with different configurations and play a wide range of programmes before finalising the position of your speakers.

### Atlantic Centre SE Loudspeaker

The loudspeaker should be positioned close to the television and mounted either above or below the screen. In turn, the television should be positioned centrally between the front loudspeakers.

The loudspeaker should be located on a stable flat surface to avoid any danger of the cabinet moving when it is vibrated by high sound levels. If you mount the unit on top of the television, move it forward so that the front grilles are level with or slightly in front of the screen. This will reduce reflections from the screen and the top of the cabinet.



## Home Theatre

### The Home Theatre Environment

The Atlantic SE Series is an integrated range. The voicing of each loudspeaker has been designed to match the others - as a result there is a sonic identity across all the models in the range. Dispersion characteristics have also been taken into account. The result is a range of loudspeakers that can be used for traditional Stereo reproduction but are equally at home in quality Home Theatre applications.

### Choosing Loudspeakers- Front Channels

You should consider carefully your choice of front loudspeakers, especially if you are *not* going to use a separate powered subwoofer.

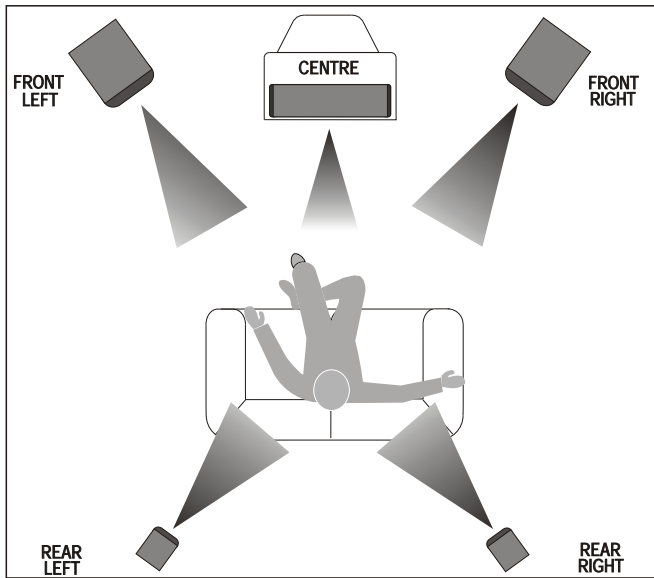
Home Theatre systems are often required to generate high levels of bass at high volume levels. Although small loudspeakers like the AT100SE, AT200SE & AT300SE will perform well as front loudspeakers especially in a smaller system, we would advise you to consider one of the larger Floor Standing Units. This is especially the case if you own a Digital processor.

### Choosing Loudspeakers- Rear Channels

You may use any regular loudspeakers in the Atlantic SE series as Rear channels. As we recommend that the loudspeakers are placed at a high level, this is perhaps best accomplished with a pair of bookshelf models placed high stands or wall mounted on suitable swivel brackets. Additionally, Rear channel intensities are seldom excessively high.

### Loudspeaker Positioning

A typical Home Theatre layout is illustrated below.



### Front and Centre Channels

The front channel loudspeakers should be placed on either side of the television screen, 2 to 3 metres apart. and rotated slightly towards the listeners.

As the Atlantic AT- Centre SE speaker carries the dialogue effects, it should be placed central to the listening position and close to the TV screen.

Operating height is important. Ideally, the front and centre channel speakers should be operated at the same height and with the tweeters at ear level to a seated listener.

### Rear Channels

We recommend placing the speakers in a high position. angled towards the listener.

### Large or Small?

Many digital AV Processors require you to specify the size of speakers in the various channels. These are usually Large or Small.

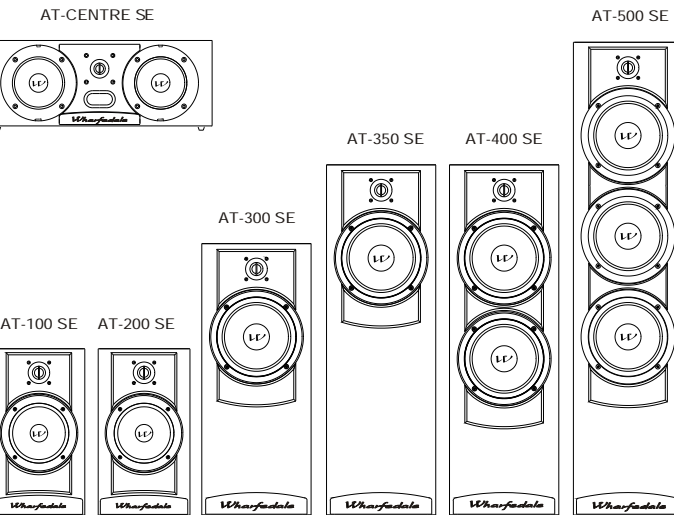
Unless there are pressing reasons for doing otherwise, we would recommend you to set the Rear and Centre channels to Small There is virtually no case to be made for setting the Centre channel at Large and as the Rear effects speakers in a Home Theatre system tend to be small the choice would appear to be obvious.

If you are NOT using a subwoofer, you *must* set the Front Channels to Large or you will get no bass! Select the Subwoofer option on your A/V processor to Off or On and the system is ready for calibration.

If you are using a separate subwoofer you should set the Rear and Centre channels to Small You now have the choice of setting the size of the Front speakers.

If you set the speakers to Small the low bass content of the front channels will be directed to the Subwoofer, along with the bass from the Rear and Centre Channels. In other words all the system bass will go into the Subwoofer. If you choose Large the Front channel bass will be reproduced from the Front speakers.

There are no hard and fast rules; however you can use the guide below as a starting point.



### LFE

The Low Frequency Effects channel was designed as an additional bass channel with its own dedicated subwoofer.

If you are not using a subwoofer, the LFE channel will be combined with the bass from other channels and all this feeds into the Front channel speakers.

When you set the LFE level from your AV processor, use care with this setting as the LFE channel may contain powerful low frequencies which, although normal in a cinema, may overload a domestic loudspeaker. If, during a programme, you hear popping or thumping noises coming from the Front loudspeakers, immediately turn the AV Processor's volume level down and then back off the LFE level.

Please read the relevant sections of your AV amplifier manual and familiarise yourself with the various issues. If you are unsure, consult your dealer for help.

If you add a subwoofer to your A/V system, follow the instructions carefully, especially with regard to setting up the system.